the amino acid sequence as shown in SEQ ID No. 3, made using the isolated DNA sequence of SEQ ID No. 1 as claimed in claim 1…". Accordingly, both new claims 30 and 33, as well as the new claims dependent thereon, now appear to be linked to the isolated DNA sequence of claim 1 as set forth in MPEP § 806.05(e). The amendments do not introduce new matter within the meaning of 35 U.S.C. § 132. Accordingly, entry of the amendments is respectfully requested.

SUMMARY OF RESTRICTION REQUIREMENT

The Examiner has required restriction of claims 18-29 and under 35 U.S.C. 121 to a single invention encompassed by the claims as follows:

> Restriction to one of the following inventions is required under 35 U.S.C. 121:
> I. Claims 1-2, 6-7, 27-29, drawn to nucleic acids and oligonucleotides, classified in class 536, subclass 23.1, 24.3, for example.
> II. Claims 3-5, drawn to methods of diagnosing a patient as having an increased risk of developing HH disease, classified in class 435, subclass 6.
> III. Claims 8-26, drawn to polypeptides, classified in class 530, subclass 350.
> The inventions are distinct, each from the other because of the following reasons:
> A) The inventions of Groups I and II are patentably distinct products because the DNA of Group I and the protein of Group II have different structures, properties and functions. The DNA of Group I is composed of nucleotides linked in phosphodiester bonds and arranged in space as a double helix. The DNA can function not only for the expression of the protein but also as a probe in a nucleic acid hybridization assay and in a nucleic acid amplification assay, for example. In contrast, the polypeptide of Group II is composed of

amino acids linked in peptide bonds and arranged spatially in a number of different tertiary structures including alpha helices, beta-pleated sheets, and hydrophobic loops (transmembrane domain). The polypeptide can function not only as a receptor but also for the generation of polyclonal and monoclonal antibodies and for the affinity purification of those antibodies or of ligands for the receptor.

B) Group II and III are patentable distinct inventions because the polypeptide of Group III is not relied upon in the method of Group II. Instead Group II uses a nucleic acid detection method. Therefore, the inventions are novel and unobvious over one another.

C) Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case the nucleic acid may be used in a materially different method such as purification methods, aptamer screening methods, hybridization assays, antisense methods.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and their divergent subject matter, restriction for examination purposes as indicated is proper.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

ELECTION

Applicants provisionally elect Group I, claims 1-2, 6-7, and

27-29, drawn to nucleic acids and oligonucleotides, with traverse.

TRAVERSAL

Applicants respectfully traverse the Examiner's restriction requirement for the following reasons.

The restriction requirement is improper because it omits "an appropriate explanation" as to the existence of a "serious burden" if a restriction were not required. (MPEP § 803). An examination of all the claims in this application would not pose a serious burden because a search of any one of invention Groups I through III would require searching the prior art areas appropriate to the other invention Groups.

Further, applicants have added new claim 30 reciting "A method for diagnosing a patient...comprising: providing the isolated DNA sequence of claim 1..."; accordingly claim 30, as well as claims 31-32 dependent on claim 30, are linked to claim 1. Similarly, applicants have added new claim 33 reciting "An isolated polypeptide comprising the amino acid sequence as shown in SEQ ID No. 3, made using the isolated DNA sequence of SEQ ID No. 1 as claimed in claim 1..."; accordingly claim 33, as well as claims 34-38 dependent on claim 33, are also linked to claim 1. Accordingly, applicants assert that it is proper for the Examiner to also these new claims as a part of the elected Group I.

Additionally, applicants have paid a filing fee for an examination of all the claims in this application. If the Examiner refuses to examine the claims paid for when this application was filed, applicants must pay duplicative fees to file divisional applications for the non-elected or withdrawn groups of claims.

CONCLUSION

In view of the foregoing, applicants respectfully request the Examiner to reconsider and withdraw the restriction requirement and to examine claims 1-38 pending in this application.

If the Examiner has any questions or wishes to discuss this matter, the Examiner is welcomed to telephone the undersigned attorney.

Respectfully submitted,

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